

Assessment of Alternatives in Roadside Vegetation Management
Project Working Group Meeting
WSDOT Northwest Region Boardroom
August 2, 2004

Dave distributed copies of an article that was on our website regarding a new method we're trying with knotweed. He said he will be sending everyone the link to the state Maintenance website.

Introductions:

Dave gave a brief summary on the way our Region is set up and a little bit of history about our building. He also thanked everyone for coming and participating and how everyone was handpicked for either their expertise and/or strong interest.

We then went around the table and had everyone introduced themselves and who they work for or affiliated with:

Dave McCormick – WSDOT Assistant Regional Administrator for Maintenance & Traffic. Been in the position for 2 years now.

Kristina Hill – Associate Professor at the University of Washington. She teaches landscape architecture and is the lead investigator of the assessment.

Rich Horner – Research Associate Professor also from the U of W. He has worked with WSDOT off and on throughout the last 25 years. He also worked as a technical advisor in a case against CALTRANS.

Heather Hansen – Executive Director of Washington Friends of Farms and Forests.

Mark Wahl – WINS (Whidbey Island No Spray) acting president

Angela Storey – Washington Toxics Coalition

Marianne Edain** – WEAN (Whidbey Environmental Action Network)

Erika Schreder** – Washington Toxics Coalition

Theresa Gandhi** – WICIN (Whidbey Island Chemically Injured Network)

Pat Moylan – WSDOT Maintenance Manager for the Northwest Region

Bob Berger – Landscape Architect. He's a roadside vegetation management consultant

Josey Paul – Clallam County No Spray Coalition

Ray Willard – WSDOT Roadside Maintenance Program Manager

Dustin Terpening (public communication coordinator) – WSDOT Communications officer for Skagit, Island & Whatcom Counties, not actually a member of the working group, responsible for organizing communication on the project.

Stan Suchan (meeting facilitator) – WSDOT Communications director for Northwest Region

John Andrews – Snohomish County Public Works env. coordinator, sitting in for Roy Scalf

Lee Dorigan – Health & environmental inspector for King County Environmental Health Dept.

Absent members:

Jay Davis – Environmental Toxicologist, US Fish and Wildlife Service

Karl Arne – Pesticide specialist from the EPA

Jack Taylor – Superintendent for Island Co. maintenance

*** Technical Advisory Committee member, attending working group meeting as observers.*

Ground rules

Stan went over the ground rules and processes for the working group:

- Today is more about brainstorming. It will be made clear when we will be making decisions and when we will just be discussing.
- One person speaks at a time. Even if you don't agree, let the other person speak
- Regarding agendas and future meetings, draft agendas will be sent out for comment or suggestions.
- Dustin will be building this group's website that will contain agendas, minutes and notes.

Purpose of this Project

Dave: In the last 2 years, the focus on what we do with roadside maintenance has shifted dramatically due to more public involvement, pilot projects, and results from other cities and counties. We need good ways of measuring and evaluating our program. Due to limited resources, we'll be focusing only on Zone 1 practices for this project. Zone 1 was chosen for 3 reasons: 1) it is where we do about 60% of our spraying; 2) it is the most controversial, and 3) regarding peer assessments, this is where we're the most different.

Role of this Group

The role of this group is as an advisory group. WSDOT will be assisted by an advisory group from the U of W on this study. WSDOT reserves the right to direct the study and will be taking the members' input and integrate it into the study.

Ray: the purpose of having the monthly meetings is to keep everyone advised and the opportunity to provide input.

If any of the members can't be here in person, there's phone conferencing available. There is no pressure on attendance.

Erika asked if Rich Horner could elaborate more on his past experiences. He talked about the different studies he has worked on regarding the urban run-off effects on wetlands and streams. He gave a brief summary on the court case he worked on against CALTRANS. He said he brings primarily stormwater management point of view.

Review Technology Advisory Committee

Ray brought to attention the list showing the technical advisory committee. This committee is made up of both internal and external members. He then asked everyone to take a look at the list and see if there is anyone else they feel should be on this committee. Theresa asked to be put on this list. This committee is more of a peer review group. Angela wanted to know if there were specific guidelines in deciding who's on the list. She asked this in reference to the two sales reps from chemical companies who are on the list. Marianne wanted to know why they are on the list too due to the fact we're wanting to reduce the use of pesticides. Dave said it's for their point of view and the fact that they had expressed early interest on being involved.

Action Item: Please send Ray names of people you feel should be on the committee. Please get this to Ray by the end of the week.

Josey Paul asked why we couldn't start with the WSDOT IVM for Roadsides guidebook from 1997. He also stated that one of the main problems is the lack of training of our maintenance workers. Ray explained the way the database (that will be created) will work. Each area will have their own specific vegetation plans and will develop their training from that. This way, we can see what did or didn't work for that area. Mark Wahl wanted to know what the researchers will be focusing on so that we don't end up reinventing the wheel. He doesn't want the researchers to be wasting their time. Dave suggested we get some basic objectives and issues out on the table.

Problem Statement/Objectives:

Ray began by saying what he hopes will be accomplished with this group. Identify the alternatives and what works and what doesn't. Also, what would be the best practice in evaluating. Erika asked why we couldn't use the IVM as a basis and build on it. Bob asked wouldn't it be logical to talk about why we're doing it rather than what we're doing?

Dave suggested we take a look at the problem description before going on to the objectives.

Some of the issues that came up regarding the Problem Description:

- WAC 173-27-040 requires reduction in herbicide use
- WSDOT has done research on other states and jurisdictions who don't spray Zone 1
- WSDOT spraying more than BC, and some other states
- Need to compile, organize, research and recommend
- 2003 was the last time the numbers were done
- need to put the numbers out on the Web

Marianne showed that the Federal Highways Admin. (FHA) already has a set of guidelines. John Andrews commented that the ESA is the biggest driving issue. Rich said there is a strong need to organize all this knowledge that is out there. Stan asked everyone if they all agree that:

- we need compiling of information
- we want to organize the info at hand
- research the alternatives
- will make recommendations

Everyone agreed. Mark W. said he feels that this shouldn't be about cost benefit analysis. Kristina said it's more cost and effectiveness. Theresa said that when we talk about cost, it should include that health is considered a cost too. Josey said that if we're talking about cost, we need to look for long term costs. He brought up the training of the maintenance workers again. John Andrews mentioned that his county council members were definitely interested in cost benefit analysis.

After some additional discussion about the wording of the draft problem description it was decided that Ray would take the discussion points into consideration and develop a revised problem description. This would be sent out to the group within a day or two and anyone who had further comments could make them by Friday the 6th for consideration in the final description to be included in the contract with UW.

Theresa commented that the design of the roads effects and encourages the usage of herbicides. Marianne reemphasized the need to look at Zone 2 & 3 in regards to Zone 1 to get the whole picture. Look at the impacts of Zone 1 to other areas (especially the wetlands). Kristina said that she & Rich will be looking at the flow into Zone 2 & 3 as they look at Zone 1. Rich agreed. Dave said we're (WSDOT) not dropping the discussion about 2&3, it's just not the main focus of this particular study. Bob: don't we need the functional need identified? Ray agreed and said it will be discussed. Erika asked how long will these field observations last? Kristina said observations as part of their study would last about 7 months. She said that these field observations will be more just "observing" and determining monitoring methodologies than actually doing any testing. Then, they will set up a multi-year program for WSDOT to follow. Rich said he's confident that they will find new ways.

Revised Task List:

Kristina and Rich took us through their task list. This will be the basis for the contract to be signed with U of W. These were kept general due to the contract.

1. Finalize scope and task breakdown. The deadline is August 5, 2004.

2. Issues that influence how WSDOT deals with Zone 1. These are the decision factors that we will be brainstorming later.
3. Develop strategies for Zone 1 management. Kristina & Rich would like to develop a comprehensive list of what works and what doesn't.
4. Comprehensive literature review.
5. Interviews with other states, agencies, etc. and compare practices.
6. Refining the list of decision factors. Organize by what is the most relevant and categorize. No policy, just to clarify.
7. Review cost effectiveness and cost benefit relationships. Benefits include vegetation management and environment. Will be sorted by what is known and not known.
8. Monitoring strategy
9. Field observations – use some GIS, go out into the field and look at the traditionally treated and the areas non-traditionally. What is typical, what's special and what's a problem.

The scope of this study is not limited to Whidbey Island, but will focus on roadsides in Western Washington.

Brainstorming:

Decision Factors (issues that influence decision-making):

Honoring critical areas ordinances
 Sedimentation
 Function of Native plant communities
 Pavement design
 Scenic beauty
 Quality of asphalt/materials
 Pedestrian safety
 Shoulder width
 Streams & wetlands
 Construction costs
 Volunteer vegetation management
 Statutory IPM
 Utility/other Right of Ways
 Groundwater recharge areas
 Offsite influences
 Diking at pavement edge-removal of buildup (hazardous)
 Fire starts
 Erosion

Super elevation
 Human health
 Zone 2 & 3
 Hydroplaning
 Pavement edge drop-off
 New construction/re-design
 Bicyclists
 Structural integrity
 Rural vs. suburban
 Employee hour requirements
 Environmentally sensitive areas
 Treasured community sites
 Sub-surface drainage of pavement
 Condition of soil – biological & physical
 Transition from Zone 1 to Zone 2
 Horizontal/vertical alignment
 Traffic volume
 Salmon & endangered species

Decision Factors (cont.)

Noxious weeds
 Wildlife, deer, otters, etc.
 Ponding
 Debris, gravel on road, garbage, etc.
 Traffic disruption
 Worker safety
 Other pollutants, oil, etc.
 Microclimates
 Traffic speed

Sight distance
 Presence of hardware, guardrails
 Stormwater quality & quantity run-off
 Hardware life, posts, metal
 Driver safety
 Community concerns, perspectives
 Curbs on shoulders
 Protected & rare plant species
 Maintenance cost

Pavement life
Volunteer litter pick-up (Adopt of Highway)
School bus activities
Extra-sensitive human sites: hospitals, schools, churches
Railroads
Drinking well locations
Historic maintenance activities
Sun or shade
Presence of invasive plants – grow through the edge
Disposing of pavement edge material that accumulates;
When you clean it up, it's contaminated.

List of Alternatives (Methods to maintain Zone 1):

Hot water
Seeding – broadcast or hydracast
Redesigning areas:
 -paving
 -eliminate guardrails
 -slope
 -restore native plant communities
 -pavement edge design
 -curb Zone 1
Growth regulators
Weed whacking, pulling, manual, hand removal
Asphalt treated base construction
Compost tea
Bump mowers
Training: plant identification, IVM, etc.
Monitoring
Foam
Soil remediation
Blading/grading
Soil binders

Non-residual herbicides
Curbing
Minimize WSDOT maintenance
Mulch under guardrails – comparative study of
 mulch varieties

Future Meeting Dates:

September 13	1-3 pm	Conference room 2A
October 5	1-3 pm	Boardroom

Privatization of work activities
Roadside foraging
Curves, hills, intersections
Laws & politics
Topography
Sole source aquifers
Soil type
Identification of edge
Aesthetics
Surface water drainage connections

Radiant heat
Weed fabric/mats
Appropriate mowing

Fertilizing
Organic pesticides, pre-emergents
Do nothing, no action
Compost
Enable scheduled maintenance
Cut thistles before they go to seed
Steam
Vinegar
Mulch
Slope change
Bio-controls (goats)

Promote appropriate vegetation
Tiger Claw – cultivation/tilling
Appropriate size mowers/equipment
Preventive maintenance – get knotweed
 early.

November 3	1-3 pm	Boardroom
December 7	1-3 pm	Boardroom

Action Items:

- Send in names for Technical Committee
- Will receive list of participant's e-mail addresses
- will receive next meeting's draft agenda for review
- Send informational contact sources & resources to Kristina
- Send out final scope of work
- send out revised purpose statement